

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

Commissioner  
 US Department of Commerce  
 United States Patent and Trademark  
 Office, PCT  
 2011 South Clark Place Room  
 CP2 5C24  
 Arlington, VA 22202  
 ETATS-UNIS D'AMERIQUE  
 in its capacity as elected Office

<b>Date of mailing</b> (day month year) 24 July 2001 (24.07.01)	<b>Applicant's or agent's file reference</b> 102019-101
<b>International application No.</b> PCT/US00/24143	<b>Priority date</b> (day month year) 03 September 1999 (03.09.99)
<b>International filing date</b> (day month year) 01 September 2000 (01.09.00)	
<b>Applicant</b> BALLARD, Stephen, G.	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

02 April 2001 (02.04.01)

☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO  
 34, chemin des Colombettes  
 1211 Geneva 20, Switzerland

Authorized Signature

Zakaria EL KHODARY

Filing Date: 01.09.2000

Transmission Date: 01.09.2000

# PATENT COOPERATION TREATY

**PCT**

## NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

Form PCT/IB/2001/1

		10 NOV 2001	
Applicant's or agent's file reference		IMPORTANT NOTIFICATION	
No. 196101			
Applicant's name	Applicant's address	Applicant's telephone	Applicant's telex
AMERICAN INTERMETALLICS INC.	10000 W. 10th Ave.	303 750 1000	
Mailing address			
AMERICAN INTERMETALLICS INC.			

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report, but not of any annexes, and will transmit such translation to those Offices.
4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts: filing translations and paying national fees, within 30 months from the priority date, or later in some Offices (Article 39(1)). See also the reminders sent by the International Bureau with Form PCT/IB 301.

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. Thus, the applicant is responsible for preparing and submitting a translation, in the language of the Office, of any annexes.

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/24143

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B01J 19/08

US CL : 422/186.04; 204/164; 75/346, 10.21, 10.23

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 422/186.04; 204/164; 75/346, 10.21, 10.23

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WEST

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,885,321 A (HIGA et al.) 23 March 1999, see abstract.	34-36 and 48
Y	US 5,935,461 A ( WITHERSPOON et al.) 10 August 1999, see abstract.	34-36 and 48

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*B* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

27 NOVEMBER 2000

Date of mailing of the international search report

20 DEC 2000

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

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WO 01/17671 A1



NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

*With international search report.*

## PCT

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FOR FURTHER READING

[illegible]

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 104

1 2 3 4

International Patent Classification (IPC) or national classification and IPC.

IPC 7 = Bold 19 08 and US Cl. 422, 186 04, 204, 164, 75, 346, 10 21, 10 23

Appendix 100

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets.

- ☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing notifications made before this Authority, (see Rule 70.16 and Section 605 of the Administrative Instructions under the PCT).

These annexes consist of a total of 10 sheets.

3. This report contains indications relating to the following items:

- |      |                                     |  |
|------|-------------------------------------|--|
| I    | <input checked="" type="checkbox"/> | Basis of the report  |
| II   | <input type="checkbox"/>            | Priority   |
| III  | <input type="checkbox"/>            | Non-establishment of report with regard to novelty, inventive step or industrial applicability   |
| IV   | <input type="checkbox"/>            | Lack of unity of invention   |
| V    | <input checked="" type="checkbox"/> | Reasoned statement under Article 45 (2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| VI   | <input type="checkbox"/>            | Certain documents cited  |
| VII  | <input type="checkbox"/>            | Certain defects in the international application   |
| VIII | <input type="checkbox"/>            | Certain observations on the international application  |

## I. Basis of the report

1. With regard to the elements marked above:

☒ the sequence listing part of the description  
 pages 1-25 is originally filed  
 pages NONE as amended (together with any statements under Article 19  
 pages NONE) filed with the demand

☒ the sequence listing part of the description  
 pages NONE is originally filed  
 pages NONE as amended (together with any statements under Article 19  
 pages 27-530) filed with the demand  
 pages NONE filed with the letter of \_\_\_\_\_

☒ the sequence listing part of the description  
 pages 1-18 is originally filed  
 pages NONE filed with the demand  
 pages NONE filed with the letter of \_\_\_\_\_

☒ the sequence listing part of the description  
 pages NONE is originally filed  
 pages NONE filed with the demand  
 pages NONE filed with the letter of \_\_\_\_\_

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.  
 These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1.b);
- ☐ the language of publication of the international application (under Rules 48.2 and 55.2);
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing \_\_\_\_\_

☐ contained in the international application as filed;

☐ contained in the international application as amended;

☐ and \_\_\_\_\_

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement:

1	Novelty (N)	Claims	YES
		Claims	NO
2	Inventive Step (IS)	Claims	YES
		Claims 14-16 and 18	NO
3	Industrial Applicability (IA)	Claims 1-18	YES
		Claims 14-16 and 18	NO

2. Citations and explanations (Rule 70.7)

1. Claims 14-16 and 18 lack novelty step under 10(1) Article 17(2) as being disclosed in HIGA et al. (58/024). HIGA's invention is directed to preparation of fine aluminum powders by solution methods. HIGA discloses in the abstract that the fine aluminum powders are of the type of air-atomized powders. HIGA and the abstract disclose the process of the preparation of the powders. Because the claims are drafted in a "product-by-process" format, it is well settled that the determination of the patentability of a "product-by-process" claim is based on the product itself and the product is unpatentable if it appears to be the same as, or a slight variation of, an prior art product which was prepared in a different manner.

2. Claims 14-16 and 18 lack an inventive step under 10(1) Article 17(2) as being disclosed in WITHERSPOON (59/044,461). WITHERSPOON'S invention is directed to pulsed high energy synthesis of fine powders. WITHERSPOON discloses in the abstract that the fine powders are of the type of air-atomized powders. The difference between WITHERSPOON'S invention and the claims is the process of the preparation of the powders. Because the claims are drafted in a "product-by-process" format, the difference is not apparent and it is well settled that the determination of the patentability of a "product-by-process" claim is based on the product itself and the product is unpatentable if it appears to be the same as, or a slight variation of, an prior art product which was prepared in a different manner.

Claims 17 and 17-17a of the criteria set forth in 10(1) Article 17(2) as being disclosed in the prior art, as they suggest an apparatus for the production of powder from a known process thereof, all the limitations as claimed.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

1-1-1987-111

VIII. General observations on the international examination

The examination was held in a well-ventilated room with adequate lighting and comfortable temperature. The examination was conducted in a fair and equitable manner.

The examination was held in a well-ventilated room with adequate lighting and comfortable temperature. The examination was conducted in a fair and equitable manner.